

## CLAIMS

1. An authentication system for authenticating a user of a telephonic device, comprising:

a setup system for capturing and storing an authentic user voice sample;

a comparison system that compares the authentic user voice sample with an inputted voice sample and generates a comparison result; and

a control system for controlling access to the telephonic device, wherein the control system:

analyzes the comparison result for an initial inputted voice sample received when a telephone call is initiated; and

periodically analyzes comparison results for ongoing inputted voice samples received during the telephone call.

2. The authentication system of claim 1, wherein the control system terminates the telephone call if the authentic user voice sample does not match the initial inputted voice sample.

3. The authentication system of claim 2, wherein the control system terminates the telephone call if the authentic user voice sample does not match an ongoing inputted voice sample.

4. The authentication system of claim 1, wherein the control system analyzes comparison results for a plurality of ongoing inputted voice samples in order to determine if the telephone call should be terminated.

5. The authentication system of claim 1, wherein the telephonic device is a portable phone.

6. The authentication system of claim 1, wherein the telephonic device comprises a system that provides access to a conference call.

7. An authentication system for authenticating a plurality of users accessing a conference call, comprising:

a setup system for capturing and storing an authentic voice sample for each of the plurality of users; and

a control system that controls user access to the conference call based on comparison results of inputted voice samples with the authentic voice samples, wherein the control system includes:

a system for analyzing the comparison results for an initial inputted voice sample for a joining user when the joining user joins the conference call; and

a system for periodically analyzing comparison results for ongoing inputted voice samples for each user during the conference call.

8. The authentication system of claim 7, wherein the control system terminates the denies access to the conference call for the joining user if the initial inputted voice sample does not match one of the authentic voice samples.

9. The authentication system of claim 8, wherein the control system terminates the access to the conference call if an ongoing inputted voice sample does not match one of the authentic voice samples.

10. The authentication system of claim 1, wherein the control system includes a system for analyzing comparison results for a plurality of ongoing inputted voice samples for a user in order to determine access to the conference call should be terminated.

11. A method for authenticating a user of a telephonic device, comprising:

capturing and storing an authentic voice sample for the user;

initiating a telephone call on the telephonic device;

comparing an initial inputted voice sample with the authentic voice sample;

deciding whether to terminate the telephone based on the compare step for the initial inputted voice sample;

periodically comparing ongoing inputted voice samples obtained during the telephone call with the authentic voice sample; and

deciding whether to terminate the telephone based on the periodic compare step for the ongoing inputted voice samples.

12. The method of claim 11, wherein the step of deciding whether to terminate the telephone call based on the compare step for the initial inputted voice sample includes the step of:

terminating the telephone call if the initial inputted voice sample does not match the authentic voice sample.

13. The method of claim 11, wherein the step of deciding whether to terminate the telephone call based on the periodic compare step for the ongoing inputted voice samples includes the step of:

terminating the telephone call if one of the ongoing inputted voice samples does not match the authentic voice sample.

14. The method of claim 11, wherein the step of deciding whether to terminate the telephone call based on the periodic compare step for the ongoing inputted voice samples includes the steps of:

analyzing comparison results for a plurality of ongoing inputted voice samples;  
and

terminating the telephone call if multiple ongoing inputted voice samples do not match the authentic voice sample.

15. A method for authenticating a plurality of users accessing a conference call, comprising:

capturing and storing an authentic voice sample for each user;

initiating access of a joining user to the conference call;

comparing an initial inputted voice sample of the joining user with the authentic voice samples;

deciding whether to allow access to the conference call based on the compare step for the joining user;

periodically comparing ongoing inputted voice samples for all joined users obtained during the conference call with the authentic voice samples; and

deciding whether to terminate access to the conference call for any of the joined users based on the periodic compare step.

16. The method of claim 15, wherein the step of deciding whether to allow access to the conference call based on the compare step for the initial inputted voice sample includes the step of:

denying access to the conference call if the initial inputted voice sample does not match one of the authentic voice samples.

17. The method of claim 16, wherein the step of deciding whether to terminate access to the conference call based on the periodic compare step for any joined users includes the step of:

terminating the conference call for a joined user if one of the ongoing inputted voice samples of the joined user does not match one of the authentic voice samples.

18. The method of claim 16, wherein the step of deciding whether to terminate access to the conference call based on the periodic compare step for any joined users includes the step of:

analyzing comparison results for a plurality of ongoing inputted voice samples for a joined user; and

terminating access to the conference call for the joined user if multiple ongoing inputted voice samples do not match one of the authentic voice samples.



19. An authentication system for authenticating a user of a voice processing system, comprising:

a setup system for capturing and storing an authentic user voice sample;

a system for obtaining inputted voice samples;

a comparison system that compares the authentic user voice sample with an inputted voice sample and generates a comparison result; and

a control system for controlling access to a device associated with the voice processing system, wherein the control system periodically analyzes comparison results generated for ongoing inputted voice samples in order to continuously control access to the device.

20. The authentication system of claim 19, wherein the device is selected from the group consisting of: a smart card, a wireless phone, and a phone system.

21. The authentication system of claim 19, wherein the control system collects and analyzes a series of comparison results for a plurality of periodically inputted voice samples in order to control access to the device.